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On the Role of Separating Territories in the Logical Structure of a Modern City

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When regulating the development of modern cities special attention should be paid to the adaptation of advances of natural sciences in applied research in urban planning and historiographical study of cities, containing factorial data on urban process. In this regard the following issues are most important: what is the whole and basic in the structure of the city, how to describe their properties, how to define their borders, how to set the integrity, indestructibility, that is, methods of conservation and listed all together can be put into further development of the regulatory regime of the city-system. In applied research the history of the formation of cities of the medieval and industrial periods in the theory of post-industrial city to date has formed a series of concepts of the delimiting territories and boundaries in the city.

Introduction of "new areas" to practice of design, areas, which are scientifically determined, which preserve the structure of the city (these areas are not defined in the present system of urban management, planning and building regulations) will lead to a new level of understanding of the system "City". Among them: the buffer area, marginal zones, and other zones of the similar origin.

Keywords: buffer zones, fringe belts, borders, boundaries, identification

Point

With the growth of urban areas clear, logical, viable structure of populated areas is becoming increasingly problematic. In this regard, the practice of structuring urban settlements contrasts the chaos of unplanned development. On the other hand in the professional community in the last third of the twentieth century there was an idea of the city as a living, largely self-developing organism, which is characterized by the phenomenon of bifurcation, entropy, synergy, etc. The last definition was borrowed from the natural sciences by the method of some analogies and, obviously, cannot describe patterns of

development of the modern city with sufficient accuracy. Therefore, the modern theory of the city develops in three areas: developing research methods analogous to accurate, natural sciences; natural adaptation of advances in applied research in urban development and adaptation of the historiographical and the urbanity of the city and morphological studies containing data on urban factorial process. Current problems in this regard are: the establishment of the indestructibility of the regime, preservation of the natural dynamics of the processes and unplanned events, and specificity, some autonomy of its individual parts. It is important to determine what is a whole in the

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“construction” of the city, what are its elements, how to describe their properties, how to define their boundaries and areas of influence. The preservation and maintenance of identity of every city and each of its elements becomes a matter of particular importance. It is well-known that every settlement has its own architectural history. The older city, the more it resembles a palimpsest, deeper contrasts of the individual areas, the problems of reconstruction and the obvious need to preserve the morphological diversity of the city environment. Architectural and environmental richness of the “physical” stories requires the establishment of the boundaries of each of the habitats, the spatial “definition”. In this regard special attention should be paid to the understanding of what are limits and boundaries of the city, how they are formed and whether the study of the process of their formation can lead to recommendations for improving the structure of modern cities.

Examples

One of the components of the crisis of major cities in XIX, early twentieth century was the changing nature of the boundaries of the city. The fortified medieval city boundary walls, ramparts, moats filled with water, not looking at the bright and clear the configuration of the physical dimensions, architectonic integrity of the city, played a role in the greater socio-political boundaries. They were intended to settle the conflict between militant social, ethnic, religious and other communities of people. We are talking about the conflict of social groups as equal parts: the person / people. The boundaries of the industrial city – the boundary between the settlements of people (town and village) and the nature and undeveloped landscape. During this period the boundaries cease to be distinct, instead they formed the suburban area, which were named as “fringe belts” in the sphere of

urban morphology. They evolved naturally in the evolution of the city, cancelling or exacerbating the conflict of a settlement (man-made landscape) and the natural complex. We are talking about the conflict of unequal components man / natural environment. The conflict is becoming acute, the closer to the outskirts of the city are industrial production, support, utilities, transportation and processing facilities and urban slums.

The Medieval Town

The object of research of the Conzen scientific school¹ was the evolution of the planning structure of cities in England, formed in the Middle Ages – the period of “natural” development of commercial cities. Study of geography implied rigorous, historically consistent documentation of the settlement plan changes, expressed as spatial quantitative and qualitative characteristics. The spatial quality characteristics described consistent urban and functional changes in the structure of the city and land ownership. Quantitative studies fixed a series of historical plans with successive proportional ratio of their elements. The result was a morphologically heterogeneous picture of the town plan. According to Cozen, the process of development of a plan of the medieval town includes: the emergence of a town, increasing the density of the town fabric, the formation of spatial barriers of growth, “leapfrogging” of such barriers, the formation and morphological changes in the homogeneity of planning units, dispersed urban development. Spatial barriers in the way of the growth of the city are: fixation line, stitch, fringe belt (M.R.G. Conzen, 1960) (Fig. 1).

Due to the Conzenian terminology the fixation line is the site of a linear feature that has, at some time, provided a barrier to development. Fortifications, such as a town wall, mark the traditional stationary fringe of an ancient town. During subsequent growth of the settlement

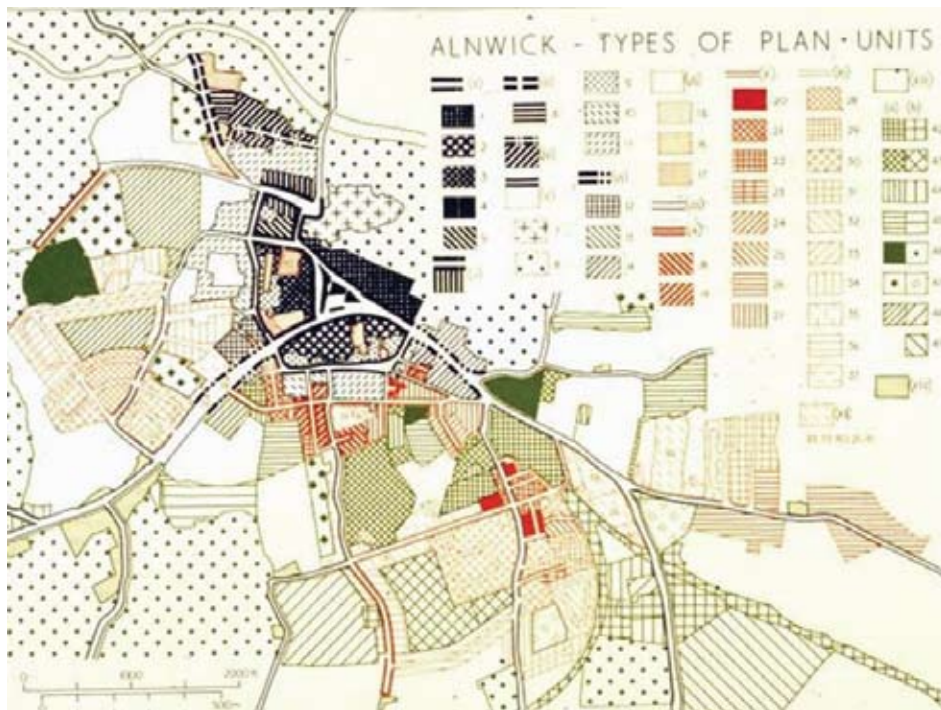


Fig. 1. Morphological Heterogeneity of the Medieval Plan of Alnwick-upon-Tyne. According to the studies of Conzen

it forms a line between the intra-mural and proximal extra-mural inner fringe belt. Fixation lines may also take the form of physical features such as rivers; man-made features such as railways; or even intangible features, eg local authority planning area boundaries, parish boundaries or the pattern of land ownership. As economic, social, demographic and political pressures for urban development exceed the barrier of resistance formed by a fixation line, the town will expand beyond its confines. It is usual that this urban fringe is of a lower density and of more open form than that part of the town inside the fixation line. Even when the physical structure of resistance is removed, forms on the ground tend to reflect the line of the barrier (for example, annular streets follow the line of walls).. (Fig. 2). It “transcends” its “fixation line” due to, applying the framework of the theory by Malysz, excessive increase of

threshold loads on the planned structure of the city (Conzen, 2009).

Typically, new urban fringes are less dense, and include more open space than part of the city within the fixation line. Even if the physical structure of the stability is displaced, the forms on the ground reflect the line of the barrier, for example, ring-shaped streets repeat the line of the city walls. The notion of “fixation line” has a spatial sense, since it has the width that can be measured in a coordinate system and is – by definition, Conzen – a barrier to the development of the city.

“Stitches” of the plan – are “lines dividing the genetically different parts of the city plan”.² Affiliated sites, construction processes of different morphological periods, plan units, morphological and landscaped areas of the city or morphotopes of the smallest scale will be divided by stitches of the plan.



Fig. 2. Wall-warehouse of the Medieval Lubeck. Photo Archive of the author

The fringe belt or Stadtrandzone was first identified by Louis during the investigation into the plan of Berlin (Louis, 1936). The conception was developed more deeply by Conzen in 1960 in the study of the development plan of Alnwick, then on the example of Scotland's major cities by Whitehand (Whitehand, 1988, 2001). Conzen defined the fringes as "a belt-shaped zone, originating from the time-constant or very slowly growing suburbs of the city, consisting of specific planning units of mixed-use function which were initially targeted at the peripheral location..." (Conzen, 1960; Conzen, 2009). Cities with a deep history display such a geographical result as a system of consecutive arrangement of concentric peripheral zones separated by other, often living entities".³ Typical examples are internal (first) fringe belt surrounding the core of the city, near the preceding fixation line, one or several intermediate (middle), fringe belts, usually separated from the inner belt by the belt of residential development, and contemporary or

outside the border belt along the modern urban-rural outskirts". Fringe belts are very important structural elements of the inner cities, where the fixation line has a significant deterrent value⁴ (Whitehand, 1988). It is quite difficult to chart the development of regulation and control of these territories with uneven development, low density and complex internal functional relationships (Kukina, 2007a). "The city fringes are characterized by spontaneity, not planning" and is typified by the only movement of the individual functions of the center to the periphery. Van der Dolen argues that where the town developed as a result of administrative acts, the fringe belt does not hold, because "decisions of users, the reasons for moving and space requirements are made on the lower level of an individual"⁵. Thus, he defined the territory of outskirts as a form and process simultaneously (Fig. 3).

A medieval town went beyond the walls and the outskirts of the city and was developing during the so-called period of "dispersed

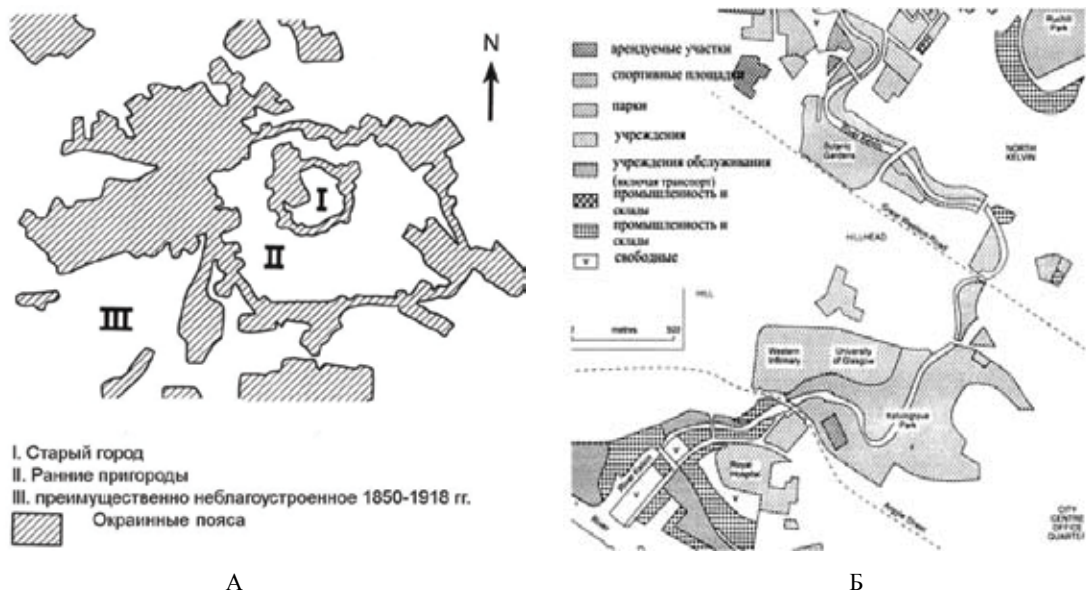


Fig. 3. A) The System of Fringe Belts of Berlin (according to the article by J. W. R. Whitehand, Urban fringe belts – development of an idea. *Planning perspective* 3 (1988), 47-58; Б) a Part of the System of Fringe Belts of Glasgow (according to the material of the conference ISUF (International Seminar on Urban Form), 2004, Glasgow, the UK)

urban development.” At this time, the scope of construction works was small enough, construction technologies were not developed to the extent that the it could uniform all buildings to the perimeter of the city. Therefore, buildings “stretched” beyond the main streets of the city earlier, and the area of the city was included in the free agricultural areas (the remains of agricultural territories) between the main streets. The uneven development of housing along major arteries resembles the characteristics of the marginal area of the city for as long as it is not included in the systematic structure of the city as a result of significant growth. Typically, at this moment the city’s development becomes controlled and planned.

The Industrial City

Theoretical search and concepts in the late XIX early XX century were aimed at finding conditions for the “optimum” city arrangement, including a rational relationship “city –

environment”, which emerged from the medieval relations. Attempts to understand, to formulate programs of urban development, which were the boundary of the city, the city has to interact with others, or differentiate its land was a part of the all the conceptions of urban utopias of the XX century.

So, Geddes in sections and schemas singles out a gradual transition zone with untouched, agricultural and industrial areas in the urbanized territory, stressing that the functional content of the transition area shall be determined by the plans of the development of the region (Geddes, 1925). E. Howard expects to approximate the optimal number of inhabitants and estates in the city – the future of the garden and the area of population: 32,000 hectares by 2500 and 12,500 hectares of fringe areas. It is essentially a green belt, which consists not only of the agricultural farms, there would be recreation areas, correctional, health and educational institutions, which are more characteristic of the city, but

also they will be used for the possible benefit of the rural population. The concept, therefore, the marginal value of non-dense area shall be made public of the core, “working” on the city and the surrounding rural areas. (Howard, 1898). Le Corbusier spends a horizontal green belt between the skyscrapers and the ground, taking a radical city from natural origin (Voisin Plan, Radiant City). E. Saarinen developed the theory of “organic decentralization” of large cities which established an unacceptable concentration of population in big cities and should be viewed in the framework of decentralization of the urban population of individual units (residential district, neighborhood), connected by highways, which lay in the green zone, separating the planning unit. E. Saarinen developed his proposals for the decentralization of Helsinki, New York, Chicago, Detroit and Hartford. His ideas have found a place in the planning and building in Stockholm, Helsinki, Oslo and Copenhagen, in part, they contribute much to the character of the territory of Scandinavia. In models of the industrial city, Tony Garnier and the line of Soria and Mata, N. Milutin assumed extensive green gaps between the urban and natural complex, functions of which are performed by recreation and green breaks along with the protective nature of industrial production.

In search of the national boundaries of urban theory rather “entered the body” of the city. Thus, N.S. Ukhina defines the border zone as a special area in the city, “where directly contact with each other a variety of functional and compositional zones: industrial and residential, historic and modern areas, large tracts of greenery and residential development, and so on” (Ukhina, 1993). The main border zones are defined: the historical boundaries, coastal zones, industrial and residential zone boundary, the border zone of historical and modern districts. O. Yavein systematized used in the literature about the

architecture of the terms describing different types of boundaries: the filter, buffer, and a gateway based on the terms proposed by S. Shermaev, C. Alexander, A Mole, I. G. Lezhava, O. Yavein as K. Lynch, determine the boundary of the city as a spatial relation, which is similar to the ideal line, which has no thickness, is indivisible. (Shuvalov, 1980, Yavein, 1982). The boundary may be an element of volume, or an independent space. Rodoman indicates that the vagueness, border, edge effect “is a common feature, common to all organisms, natural and man-made landscapes, as well as many buildings and structures, their units and complexes.” V.L. Kagan, V.E. Shuvalov justify the barrier function of the contact and the geographical boundaries of the city (Shuvalov, 1980). K.N. Nenarokova introduces the concept of “active layer” in the contact area of the city and its surroundings, “a complex of buildings, structures and plantings, open spaces, farms, located on the surface of the earth, and its upper boundary can be considered as the limit of the vertical impact on the atmospheric layers, the bottom on the geological layers.” (Kukina, 2007a). The latter definition is very close to an understanding of the outlying areas in German and English schools urban morphology, but makes a significant addition – the impact of the natural range in elevation from the geological layers to atmospheric. This underscores the depth of technological change in the structure of the city, typical of the late twentieth century. Overall, however, dividing the territory explored and evaluated more in terms of “the behavior” of space and analytical comparison with the phenomena in other fields of knowledge, without the factual study of the accumulation of certain properties and their evolution (Kukina, 2007, Kukina, 2007a, Kukina, 2011a).

Applied town planning has a notion of “suburban area” and it has developed a hierarchy of green spaces of different functionality (based

on the concept of open spaces) separating the structural elements of the city (in the writings of M. Hauke, J. B. Khromov, A.P. Vergunova, M.E. Vaytensa, V.A. Kamensky, V. A. Nefedov, L.S. Zaleskaya, E.M. Mikulina); there are presented first results of the operation of suburban areas (S.M. Gerashchenko, S.B. Pomorov). (Bocharov, 1989; Bocharov, 1988; Krogius, 1983).

Cities of the North America colonial origin have evolved using a different scenario and traditions of forming the fringes of the city are different from European ones. J. Forrester builds a theory of the dynamics of a modern American city, describing the processes of development zones, which heterogeneity alternately performs buffer functions. According to John Forrester the development of the city includes: the emergence of the free territory, which has an internal economic potential, in the first stage outlines a business center, surrounded by arrays of residential buildings – a barrier to expanding the area of the business sector. The second phase of housing construction comes as the aging of housing forming the first inner ring of the city, and moving out of their families, managers, professionals and other skilled personnel. Settling and consolidation of the old fund by marginal, poor and underemployed social strata of society contribute to the prevention of demolition of the old ring of housing, prevent the expansion of the downtown. The movement of residence of a wealthy class in the outer ring of the city encourages the development of entrepreneurial activity within their own borders. Then comes the second stage of deterioration. The most dilapidated housing in the city center, in the end, it is necessary to demolish and replace with new buildings. New residential units of the highest category (super profitableness house) are intended for those employees who work in institutions located in the city center. While at the center of the

city dwellers are replaced with new, comfortable buildings, closest to the old part of the new outlying areas, there is a gradual obsolescence of residential and industrial premises. A successful class is beginning to move into new buildings. As a result, the inner marginal areas over time will gradually expand outward from the center to slum areas (Forrester, 1974). The “wave-like” move stagnant areas are the dynamics of the city – believes John Forrester.

The development of the transport system forces production facilities to be moved along the highways in the direction to the city. Around them we can see again workers’ settlements, and again separates a class of top managers in a separate planning unit. In fact just the same way it is done in European conurbations, such as the “finger plan” of Copenhagen, the circular agglomeration of Western Holland (Holland Radstad), new areas of the suburbs of Stockholm and Helsinki, and others.

The process is the same, but it takes different forms. In European cities the commitment to picturesque plan is not broken, it is defined in urban morphology as “mental memory of the society”, as a natural process of germination of urbanity of largest organisms, from the medieval “coherence” between man and nature, who had found in the geography of the place his/her shelter and protection, food and compositional orientation in the microcosm of the city, and in space. However, the layout of American cities also very much rests on the mentality of the period of mass immigrants arriving in the port city of the New World: New York (receiving the plan of “grid” in 1811), Philadelphia (a colonial regular plan in 1680) and Chicago (1820) (Reps, 1965).

The end of the eighteenth century – the time of domination of “agricultural ethics” households and its minimum not limiting the urban policy in the United States. But the “agrarian philosophy”

of the XVIII century became the driving force that led to the device of public parks in the second half of the XIX century, the establishment of a unified state system of national parks in the 30-40 years of the twentieth century, the formation of the concept of “green corridors”, cutting the “grid” of the plan and in the end, the concept of environmental planning in the 60 years of the twentieth century. In 1869, following the project of F.L. Olmsted and C. Vaux, creators of the Central Park in New York, Riverside was being built in Illinois, nine miles west of Chicago on the River Des Pleyne according to the pattern of “English park”: the soft curves of picturesque streets of the individual residential development with deep lawns near the houses in the shade of large trees. So there was a model of suburban, “quasi-rural residential and exclusively” organization of space, which has become a status symbol of the first-class America. For example, many Riversides were built and many suburbs of large cities, and so far, this concept holds for individual planning units of residential development (Unagaeva, 2011; Unagaeva, 2006; Unagaeva, 2006a).

This event not only resulted in the construction of public parks in cities across America, but also gave birth to the landscape architecture as an independent field of activity, and further the formation of a network of national parks in the United States. It is in the process of the organization of the National Parks of Yellowstone and Yosemite was the first time when the conflict between human/natural environment was realized; in order to smoothen its intensity buffer zones were developed. In the twentieth century, buffer zones are designed first for the U.S. national road (Road Blue Ridge park, park roads of New York, Boston, etc.), and then were “included” in the body of a dense city in the “green corridors”. In all three cases it was used in the same sense: the “non-penetration buffer” consists of successive layers of bands of varying

degrees of regulation, with a gradual escalating of ecological capacity of a given territory. The buffer zone of road, however, is a complicated extended spatial composition that separates the highways from agricultural and natural land. These include: a series of linear parks along the road with a splash of service systems, farms, museums and towns-museums, restored as exposure time of colonization.

Buffers of “green corridors” are intended to preserve any species in the city. For example, “green corridors” of Seattle in Washington State’s population of the suburbs with almost two million inhabitants, are designed to save the salmon spawning routes, entering Puget Sound and continuing its way in the small rivers in the body of the city. The status of each of the areas is constantly monitored by the system for monitoring the diversity, quality and quantity of species, and the legal system of zoning (Figs. 4, 5, 6).

The famous argument of Ian McHarg “dialogue with nature or the nature of dialogue,” nominated in the making of environmental planning in the late 60s of last century, in the modern urban planning has acquired extraordinary importance (McHarg, 1971). Environmental planning is more and more gaining its ground as an equal part in designing master plans of cities and the detailed planning of projects in most countries. In the last quarter of the twentieth century there were found new ways to adapt the basic science of ecology methods (such as biology), geography (as an equivalent component urban morphology), chemistry (as an integral part of the hygiene problems of cities), physics (fluctuation processes), mathematics, and other applied research for theoretical and practical needs of urban development. The purpose of environmental planning was announced: ensuring a healthy lifestyle through the best use of physical and geographical features of towns and villages, the most favorable coexistence of humans

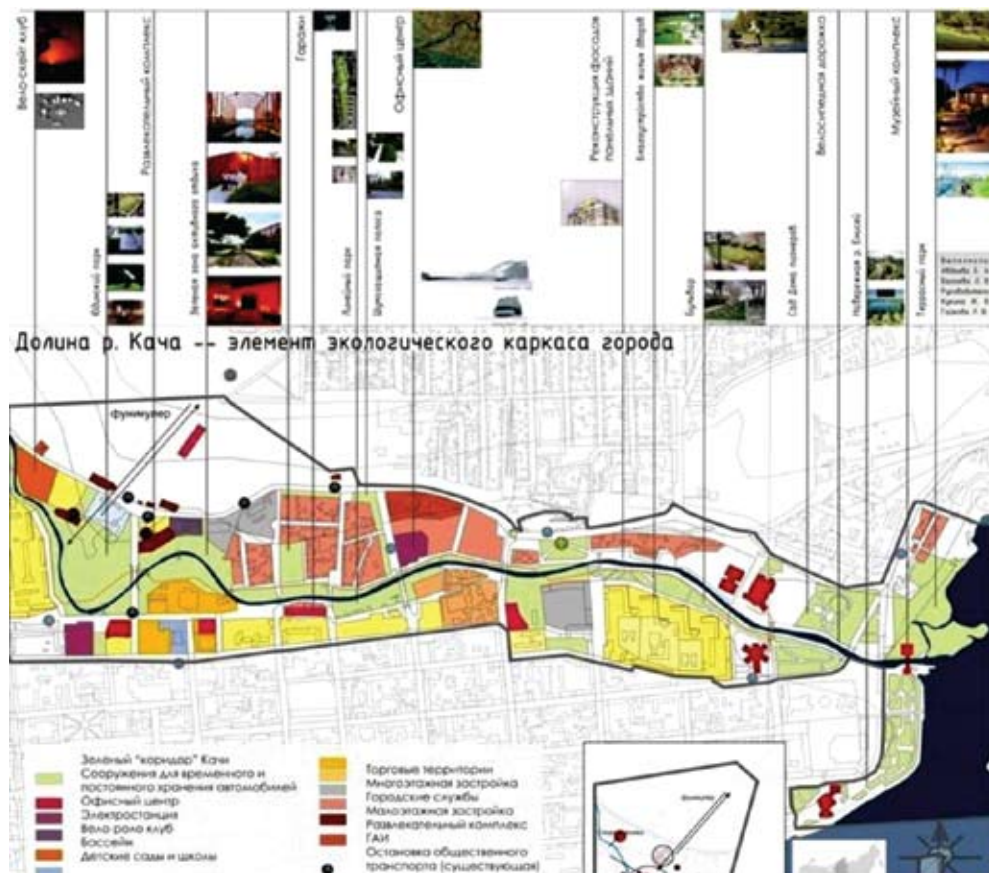


Fig. 4. The Educational Project “Buffer Zone” of the River of Kacha in Krasnoyarsk. Designed by the student E. A. Avdeeva, I.V. Kukina is the supervisor (2006)

and other species in the modern technological environment, with all its components. The essence of environmental planning policy was a “start” planning units in the structure of natural ecosystems. It is significant that the first settlements of environmental planning projects were carried out in the landscape design firms: Harbour Town, Sea Pines Plantation in “Sasaki, Walker and the Association”, River Ranch, Pleasant Gardens – Association of the CPC and the others (more than two hundred items in a list of the American Planning Association) (Kukina, 2005; Unagaeva, 2006).

The concepts “the city is a garden of the future” and “environmental planning” bring together a strong “natural component”, but

they are based on fundamentally different assumptions. The concept of “garden city” the city is at the center of the microcosm, the nature “protects” it by pulling over some recreational functions, and in this sense its job is “marginal”, as the center of the polar component. Environmental planning 60s, in a sense a return to the medieval understanding of the relationship of “man-nature” – “a refinement” in the situation. In the center of attention, and often the songs preserve the natural characteristics of the complex: the swamp and its ecosystem of the delta of the river, forests, dunes, coast, rocky deserts, etc. That is the gradual reorientation of understanding man’s place in the city environment.



Fig. 5. “The Green Corridor” Buffer of the Historic Center of Hamburg. Photo archive of the author



Fig. 6. Replacing the Former Fortifications of Hamburg by the “Green Corridor” Buffer in the Historic Center of 1909. Photo archive of the author

Close to the concepts of environmental planning and urban development in the domestic urban morphology can be considered the concept of the landscape of the city that has developed in the framework of landscape-ecological research in the field of urban renewal in the 1970s and early 80s of the XX century (V.I. Gutsalenko, B. Tobilevich). It is based on the idea of the landscape of the city as one of the objective characteristics of the medium – its material and objective basis, which is formed by the interaction and interrelationship of natural and anthropogenic components of the city. Based on this concept we formulate ideas about the structure of the landscape of the city, consisting of landscaped areas and differences, spatial planning and subordinates first. The procedure is developed for determining the boundaries of the morphological heterogeneity of landscape areas of the city. The concept evolved in the course of the study of large cities: Moscow, Lvov, Barnaul, Kungur, Kaluga, Penza, Sverdlovsk and others (Bocharov, 1988; Bocharov, 1989; Krainyaya, 2009).

In parallel we proceeded to clarify a number of theoretical concepts. It was a similar conclusion about the periodicity of urban morphology of a historic city. So if the initial stages of the landscape of the city were a subject of one of the main functions – strategic, commercial, or others under the general venue that meets the social, strategic objectives (the Kremlin, a fortress, shopping area). It is at this stage, a landscape of the historic city was separated. It became a stable balance, a power to ensure that the natural forces within the complex, and earned the main focus of its development provided for a balance of natural and anthropogenic component of the urban landscape and the dynamic stability of the system as a whole.

The growth of cities, the increase of their territories, the gradual saturation of the functions

in these volumes was accompanied by the enrichment of construction. All this increased the overall impact on the natural system, modified, and sometimes erased, disappeared small (and sometimes secondary) landforms, rivers, streams, disappeared, or increment plantings, etc. This accumulation and the growth of new properties and features in the landscape of the city took place before a certain period until a certain developed natural complex reminded about itself: secondary flooding, erosion, landslides, mudflows, and other negative phenomena – and the City “departed” from the troubled areas. “New” signs mean that the ecosystem as a whole landscape of the city was full and was not able to recover on their own without any additional effort from the outside. In a relatively short period of time became a different landscape of the city, to a greater extent with responsibility for all the parameters of their time and developed a different way. It became clear that the older the city, the more of these shifts and impacts on the natural system is found in it. The problems of environmental violations are aggravated when the accommodation, such as industrial zones, highways starts to run counter to the properties of the natural complex. On the one hand the improvement of building technology caters to the growing social needs; on the other hand, all of the impact on natural systems starts to go against its properties. It starts with the time when you can build anything anywhere; share the same response on the part of the natural complex on this process – multiple violations in the medium. In this sense, the concept of the landscape of the city is close to the theory of the accumulation of threshold properties by B. Malyshev.

Comparing the findings of the historical and theoretical research in urban morphology we need to highlight the marginal zone, the findings in the landscape and ecological direction of research and theory of urban morphology in the dynamics and the periodicity of the city, similar

in content in areas of heterogeneous methods for determining the areas in the city, resulting scientific information about outlying areas in urban morphology and recommendations for the program for their further development into the landscape and ecological direction; here a special status of the territories between the city and its surrounding lands is viewed in its full clarity.

The second half of the twentieth century is the time of an unprecedented rate of urban development, the formation of the concepts of “new town” and “regional city”, the search for optimal parameters of urban area development.

The Postindustrial City

The urban theory has developed a collective understanding of the regional multi-faceted city, and was given the task of structural differentiation of self-contained planning units through a system of open spaces. But the concept of “open space” has not received proper theoretical understanding and application development.

The theoretical models and the concepts of a regional self-developing city, consisting of closely interacting, but still independent structural elements have not led to a definite understanding of the constraints and differentiating elements of the plan. Probably because more attention has been focused on the emergence and development of the core elements of the settlement and attention to the “territorial-spatial” properties of the boundaries of the city that emerged

historically as well as attention to the process of “leapfrogging” the former city boundaries because of the extraordinary stability of the internal connections of the latter. High capacity for self-preservation of the former outlying areas in the structure of the modern city can be attributed to unusually complex functional and physical content, and the difficulties faced by the city to destroy the internal connections of the former suburbs. Historically marginal areas can be considered as a morphological transitional form now existing as internal “non-penetration” buffers that preserve the features of urban, rural, historical, industrial types of planning and development, as well as components and elements of the natural complex.

Resume

Marginal territories change their status, but remain historical in terms of morphological components of a complex functional structure. Historical marginal areas in a modern city, as a rule, serve as a buffer zone of the dual nature: dividing, preservative, and at the same time mitigating the influence of neighboring functional areas of the city.

Almost all scholars “working on the border of the city,” or studying the problems of internal divisions agree in opinion that this kind of space represents an essential element in the full structure of the modern city, subject to planning, design and management.

¹ “Scientific Conzen School” in this case is the literal translation of the name in the field of physical geography of the United Kingdom, which appeared at the Department of Geography of University of Newcastle-upon-Tyne.

² Conzen M.R.G. Historical townscapes in Britain: a problem in applied geography, in House J.W. ed. Northern geographical essays in honor of G.H.J. Daysh /Oriel Press, Newcastle upon Tyne p. 128

³ Conzen M.R.G. Historical townscapes in Britain: a problem in applied geography, in House J.W. ed. Northern geographical essays in honor of G.H.J. Daysh /Oriel Press, Newcastle upon Tyne p. 125

⁴ Whitehand J. W. R. Urban fringe belts – development of an idea. Planning perspective № 3, 1988 p. 54-55

⁵ Ibid., 58

References

- M.R.G. Conzen, Alnwick, Northumberland: a study in town-plan analysis. *George Philip, London. Institute of British Geographers Publication*, 27 (1960) 135 p.
- M.P. Conzen, How cities internalize their former urban fringes: a cross-cultural comparison, *Urban Morphology* 13.1 (2009) p.12-18
- Ibid 80, 105
- P. Geddes, The Valley Plan of Civilization, *The Survey* 54 (1925) p 288-290, 322-325
- E. Howard, To-morrow: A Peaceful Path to Real Reform, *London: Swan Sonnenschein*, 1898, 35 p.
- K. Kropf, Aspects of urban form, *Urban Morphology* 13.2 (2009), 21-26
- H. Louis, Die geographische Gliederung von Gross-Berlin, in *Louis, H. and Pauzer, W. (eds.) "Landerkundliche Forschung – Krebs – Festschrift (Engelhorn, Stuttgart)"* (1936) 146-71
- Y. Lin, B. De Meulder and S. Wang, From village to metropolis: a case of morphological transformation in Guangzhou, China, *Urban Morphology* 15.1 (2011), 12-15
- B. Malisz, La formation des systemes d`habitat. *Esquisse de la theorie des seuils. Paris*, 1972
- Ian L. McHarg, Design with Nature, *Published for the American Museum of Natural History Doubleday/Natural History Press Doubleday & Company, Inc. Garden City, New York. Paperback edition*, 1971, p. 198
- J.W. Reps, The making of urban America, *Princeton University Press. Princeton, NJ*, 1965, 583
- Frank S. So, The Practice of Local Government Planning. *Second Edition/ICMA Training institute/Chapter 2/ Historical development of American planning*. p. 21
- J. W. R. Whitehand, Urban fringe belts – development of an idea. *Planning perspective* 3 (1988), 47-58
- J.W.R. Whitehand, The structure of urban landscapes: strengthening research and practice, *Urban Morphology* 13.1 (2009), 21-26
- J.W.R. Whitehand British urban morphology: the Conzenian tradition, *Urban Morphology* 5.2 (2001), 32-35
- Ю.П. Бочаров [U.P. Bocharov], Оценка ландшафта исторической части г. Львова для ее развития и реконструкции /Ю.П. Бочаров, М. К. Савельев, В. И. Гуцаленко. М.: ЦНИИП градостроительства, 1989, 64.
- Ю.П. Бочаров [U.P. Bocharov], Разработать основные положения архитектурно-пространственной организации жилой застройки (ландшафтно-экологический аспект) /Ю. П. Бочаров, Э. О. Товмасьян, А. С. Апарин, Н. П. Крайняя, В. И. Гуцаленко. М.: ЦНИИП градостроительства, 1988, 9.
- В.Р. Крогиус [V.R. Krogius], Разработать рекомендации по реконструкции сложившейся застройки центрального района г. Пензы / В. Р. Крогиус, Г. А. Малоян, Н. Н. Бочарова, В. И. Гуцаленко, Н. П. Крайняя. М.: ЦНИИП градостроительства, 1983, 51.
- Н.П. Крайняя [N.P. Krainaya], «Кризис жилой среды крупнейших городов и новые тенденции в ее развитии», *Academia*, 2 (2009), 32-37
- Н.П. Крайняя [N.P. Krainaya], «К поискам социальности в формировании городской застройки», *Academia*, 2 (2009), 73-76
- И.В. Кукина [I.V. Kukina], «Элементарные планировочные жилые образования», *Жилищное строительство*, 8 (2005), 26-29.

И.В. Кукина [I.V. Kukina], «Буферные зоны крупных городов», *Вестник КрасГАСА*, (2006) 174с.

И.В. Кукина [I.V. Kukina], «Серегированный город» или стратегия развития Стокгольма на 2030 г., *Вестник Иркутского государственного технического университета*, №3 (31), (2007), 77-82.

И.В. Кукина [I.V. Kukina], Границы города. Академические концепции XX века и их влияние на генеральные планы городов, *Градостроительное искусство. Новые материалы исследования*, 1 (2007),

И.В. Кукина, И.Г. Позднякова [I.V. Kukina, I.G. Pozdnyakova]. «Развитие научных концепций элементарных жилых образований в конце XX – начале XXI века», *Жилищное строительство* 11 (2010), 42-48.

И.В. Кукина [I.V. Kukina], «Взаимоотношение оптимального и минималистского в идее микрорайона», *Градостроительное искусство. Новые материалы исследования*, 2 (2010) с. 166-179.

И.В. Кукина [I.V. Kukina], «Искусство выживания»: некоторые аспекты концепции «идеального города» в XXI в. в зарубежных странах», *Известия вузов. Строительство*, 2 (2011), 84-90.

И.В. Кукина [I.V. Kukina], Регламенты «свободного развития» урбанизированных территорий в планируемом создании агломераций в зарубежных странах, *Academia* 3 (2011), 81-86.

П. Мерлен [P. Merlen], Новые города. Районная планировка и градостроительство. Перевод с французского. Издательство «Прогресс». Москва, 1975 (Оригинал 1969 г.)

К.Н. Ненарокова [K.N. Nenerokova], Взаимодействие периферийных районов городской застройки и ближайшего внегородского окружения (на примере Москвы). *Автореф. дис. канд. архитектуры*, МАРХИ, 1989, 32 с.

И.Г. Позднякова [I.G. Pozdnyakova], «Дежавю концепции микрорайона в XXI веке», *Архитектон. Известия вузов*, 30 (2010)

Режим доступа: http://archvuz.ru/numbers/2010_22/021 от 20.10.2011

Н.А. Унагаева [N.A. Unagaeva], «Природа» и «город» в ландшафтном бриколаже, *Современная архитектура мира: СПб.: Нестор-История* 1 (2011) С.279-291.

Н. А. Унагаева [N.A. Unagaeva], Эволюция содержания ландшафтной архитектуры как самостоятельной творческой деятельности, *Строительство. Известия вузов*, (2006) С. 71-76.

Н. А. Унагаева [N.A. Unagaeva], К вопросу о культурологическом подходе в решении инженерных и экологических проблем методами современной ландшафтной архитектуры, *Вестник КрасГАУ*, 15 (2006), 541-544.

Н. С. Ухина [N.S. Uhina], Пограничные зоны в структуре города. *Автореф. дис. канд. архитектуры*, (МАРХИ, 1993) 30 с.

Дж. Форрестер [J. Forrester], Динамика развития города. *Перевод с английского М.Г. Орловой. «Прогресс», Москва*, 1974. стр. 285

В. Е. Шувалов [V.E. Shuvalov], Понятие границы и эффекта пограничности и их место в экономико-географических исследованиях. *Автореф. дис. канд. геогр. наук* (М, 1980) 28 с.

О.Н. Явейн [O.N. Yavein], Проблемы пространственных границ в архитектуре. *Автореф. дис. канд. архитектуры* (М, 1982) 28 с.

О роли разделяющих территорий в логике структуры современного города

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В регулировании развития современных городов приобретает значение адаптация естественнонаучных достижений в прикладные исследования в градостроительстве и историографических исследований города, содержащих факторные данные о градостроительном процессе. Важными вопросами в данной связи становятся: что есть целое, элементарное в структуре города; как описать его свойства; как определить его границы; как установить режим цельности, неразрушимости; что есть методы сохранения и как все вместе перечисленное может быть введено в режим регулирования дальнейшего развития градосистем. В прикладных исследованиях истории формирования городов: средневекового, промышленного периодов и в теории постиндустриального города к настоящему времени сформировалась серия концепций разграничивающих территорий и границ в городе. Введение в практику проектирования научно обоснованных, сохраняющих структуру города «новых зон» (не определенных в настоящей системе городского регулирования, проектных и строительных регламентов) приведет к новому уровню понимания системы «Город». Среди них: буферные территории, окраинные пояса и другие родственного происхождения.

Ключевые слова: буферные зоны, окраинные пояса, границы, идентификация.
